

### **REMARKS**

This Amendment is being filed in response to the Office Action mailed from the U.S. Patent and Trademark Office on January 11, 2005, in which claims 1-4 were rejected. With this Amendment, claims 5-9 are canceled, claims 1-4 are amended, and new claims 10-22 are added. As such, Applicants respectfully request reconsideration and allowance of pending claims 1-4 and 10-22.

The Office Action rejected claim 2 under 35 U.S.C. 112, second paragraph, as being indefinite. The Office Action rejected claims 1-4 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 20020035451 to Rothermel ("the Rothermel '451 publication") in view of U.S. Patent Publication No. 20020024517 to Yamaguchi et al. ("the Yamaguchi '517 publication").

### **Two Information Disclosure Statements**

Two Information Disclosure Statements were filed on March 24, 2004, and April 5, 2004. Entry of the two Information Disclosure Statements is respectfully requested. For the Examiner's reference, copies of the USPTO Form 1449 filed on March 24, 2004, and April 5, 2004 are attached hereto. Applicants respectfully request that initialed copies of the two Information Disclosure Statements Form 1449 filed on March 24, 2004, and April 5, 2004 be sent with the next USPTO correspondence.

### **Office Action Rejections**

The Office Action rejected claim 2 under 35 U.S.C. 112, second paragraph, as being indefinite. The Office Action states at page 1:

Claim 2 recites the limitation "the invention" in line 3. It is not clear as to which invention the application is referred to. There is insufficient antecedent basis for this limitation in the claim.

As filed and pending, claim 2 does not recite the limitation "the invention." Applicants believe that the Office Action intended to reject Claim 3 instead of Claim 2. Applicants have

removed the term “the invention” from amended Claim 3 and therefore this rejection, as it refers to claim 3, is moot and should be withdrawn.

The Office Action rejected claims 1-4 under 35 U.S.C. 103(a) as being unpatentable over Rothermel US 20020035451 in view of Yamaguchi et al., US 20020024517. The Office Action states at pages 1-2:

As to claim 1... Rothermel does not explicitly disclose the use of an import application programming interface linked to the format verifier for importing the intelligent design in the applicable format for viewing the intelligent design; and a memory resident data model, linked to the import application-programming interface, is a database for storing the properties and functional characteristics of the intelligent design. However, Rothermel discloses a database that can be continually maintained in a disk arrays with information on the design file (intelligent design) (paragraph [0104]).

Yamaguchi discloses the claimed “an import application programming interface linked to the format verifier for importing the intelligent design in the applicable format for viewing the intelligent design; and a memory resident data model, linked to the import application-programming interface, is a database for storing the properties and functional characteristics of the intelligent design” by receiving a photographed data to produce a three dimensional model data and importing such produced three-dimensional model data into a virtual three-dimensional space of a computer application (see paragraph [0024]), wherein the produced three dimensional model data (intelligent design) is stored in a database (see item 1001A).

As to claim 2, Yamaguchi discloses the claimed “a query application programming interface, linked to the memory resident data model, for searching for at least one element in the memory resident data model” (see paragraph [0209]); and “a user interface, linked to the query application programming interface for interactively accessing the memory resident data model” (see paragraph [0209]).

As to claim 3, Rothermel discloses the claimed “at least one format writer, linked to the query application interface, for scripting within the invention thereby allowing the user to control local configuration and behavior of the user interface” “(see paragraphs [0101, 0104, 0114]).

As to claim 4, Rothermel discloses the claimed “a collaborative network element, linked by at least one medium to the memory resident data model, for using the apparatus across a global computer network” (see paragraph [0044, 0094, 0209]).

“Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art.” M.P.E.P. 2143.01. “The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art.” *In re Kotzab*, 217 F.3d 1365, 1370, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000). See also *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992); M.P.E.P. 2143.01.

With the Amendment, Applicants have amended independent claim 1 to claim an apparatus for viewing at least one intelligent design using at least one computer comprising: a library of format readers; a format verifier; an import application-programming interface for converting the specific format of the intelligent design; and a memory resident data model for storing the properties and functional characteristics of the intelligent design, **wherein the apparatus is configured as a single application.**

None of the cited prior art references, alone or in combination, disclose, teach or suggest an apparatus for storing the properties and functional characteristics of an intelligent design, **wherein the apparatus is configured as a single application.**

In contrast to Applicants’ claimed invention, Rothermel discloses an online system and a method of geo-spatially viewing project oriented data relating to engineering, construction, and operations computer-aided design services online using a browser-based viewer. The Rothermel system for viewing project-oriented data comprises a browser-based geospatial viewer operative to enable geospatial viewing of data according to geospatial attributes associated with said data; and a browser-based project-oriented, collaboration system. Rothermel does NOT disclose, suggest or teach an apparatus for storing the properties and functional characteristics of an intelligent design, **wherein the apparatus is configured as a single application.**

In fact, Rothermel discloses a component-based application composed of a number of components, and is not a single application:

As noted herein above, **the ECO CAD application according to the present invention is component-based. In the preferred embodiment of this invention, the component-based ECO CAD application is configured according to an XML schema.** (US 20020035451, pg. 10, paragraph [0107])

**With centralized drawing storage and off-site record keeping,** complex projects take up little local disk space. And because **projects are stored off-site,** the user gets protection from local network outages and an assured backup scheme. All users have constant access to the most current data, all the time. (US 20020035451, pg. 10-11, paragraph [0109])

More specifically, the present invention features **systems, methods and computer program products by which ECO CAD software application services may be efficiently provided over the Internet.** (US 20020035451, pg. 4, paragraph [0041])

Advantageously, the viewer of the present invention can provide **a geospatial visualization of project collaboration datasets** by spatially enabling the project collaboration datasets, by adding a spatial reference to the project collaboration datasets, and by enabling browser-based viewing of the project-oriented collaboration system data via a map. (US 20020035451, pg. 4, paragraph [0044])

Basic use of the ECO CAD application is now described. If the user is a user, the site appears differently than if the user is a project administrator. No matter who the user is, the site is constructed to lead the user through the process of establishing and maintaining a project as quickly and easily as possible. At each step, tools are provided to ensure that all interested parties are kept informed of all communications, both verbal and graphic. Even people outside the immediate project list can be kept informed with tools that **allow the user to send design information over the Web to users without CAD tools or related experience.** (US 20020035451, pg. 10, paragraph [0108])

The additional cited reference of Yamaguchi does not cure or offer a suggestion on how to overcome the deficiencies of Rothermel. In contrast to Applicants' claimed invention, Yamaguchi discloses an apparatus and method for producing three-dimensional model data for an object as follows:

**This invention relates to an apparatus and method for producing three-dimensional model data for an object, or producing images that view the object from any viewpoint, based on object distance data obtained by a stereo ranging method.** And this invention relates to a system and method for presenting three-dimensional model data for real objects in virtual three-dimensional space. (US 20020024517, pg. 1, paragraph [0002])(emphasis added).

Yamaguchi does NOT disclose an apparatus for viewing an intelligent design. Further, Yamaguchi does NOT disclose an apparatus for storing the properties and functional characteristics of an intelligent design, **wherein the apparatus is configured as a single application.**

With this Amendment, Applicants have amended independent claim 1 and dependent claims 2-4 to recite an apparatus comprising a library of format readers; a format verifier; an import application-programming interface for converting the specific format of the intelligent design; and a memory resident data model for the storing the properties and functional characteristics of the intelligent design, wherein the apparatus is configured as a single application. No new matter is added with this Amendment. Support for this Amendment can be found throughout Applicant's Patent Publication No. US 20020067364, and specifically in pg. 1, paragraph [0008]; pg. 3, paragraph [0042]; pg. 4, paragraphs [0088-0089] and [0091] as shown below.

**The present invention is the result of the realization that by providing a single software application capable of accessing and transmitting a complete electronic product design with three - dimensional imaging and date information, without the need for the host CAD/CAE system, the application establishes a central cockpit for unrestricted browsing, querying and communicating of electronic product design information for the entire company. (U.S. Patent Publication No. 20020067364, pg. 1, paragraph [0008]) (Emphasis added).**

The invention offers a unique and ideal platform for dynamic exchange and visualization of the electronic layout data against its full 3D mechanical environment. **Because the invention has an open application-programming interface ("API") available to other processes, it allows for dynamic exchange and correlation of design details with external 3D modeling tools.** It provides a common communication channel between the mechanical and electrical design groups. (U.S. Patent Publication No. 20020067364, pg. 3, paragraph [0042]) (Emphasis added).

### **Open API for creating custom format readers 3.3**

Reading modules import data from a specific external file into the Client's run-time memory resident Data Model 3.4. They are implemented as modules that are separate from the memory resident Data Model 3.4. The reading modules 3.1-3.3 are used to load external data into the invention's run-time Data Model 3.4. **These**

**modules communicate with the invention through open API that is independent of the OS platform. Matching of a module to a format is automatic and does not require user intervention.** (U.S. Patent Publication No. 20020067364, pg. 4, paragraphs [0088] - [0089]) (Emphasis added).

**Export modules are used to extract data from the memory resident Data Model 3.4.** (U.S. Patent Publication No. 20020067364, pg. 4, paragraphs [0091]) (Emphasis added).

With this Amendment, Applicants have added new claims 10-22. New claims 10-12 recite properties of the memory resident data model. Support for new claims 10-12 can be found throughout Applicants' specification as filed, and specifically on pg. 1, paragraphs [0010-0011]. Support for new claims 13-22 can be found throughout Applicants' specification as filed, and specifically on in pg. 1, paragraph [0008]; pg. 3, paragraph [0042]; pg. 4, paragraphs [0088-0089] and [0091] as shown above. With this Amendment, no new matter has been added. Applicant believes new claims 10-22 are allowable over the prior art of record, and Applicant respectfully requests consideration and allowance of new claims 10-22.

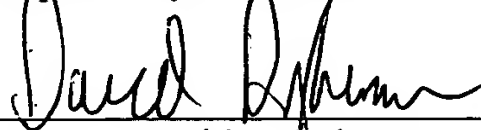
In summary, the cited prior references, alone or in combination, do not disclose, teach or suggest Applicants' claimed invention in pending claims 1-4 and 10-22, and the rejections in the Office Action should accordingly be withdrawn. Reconsideration and allowance of pending claims 1-4 and 10-22 is respectfully requested.

Applicants have made an earnest effort to respond to all issues raised in the Office Action of January 11, 2005, and to place all claims presented in condition for allowance. No amendment made was for the purpose of narrowing the scope of any claim, unless Applicants have argued herein that such amendment was made to distinguish over a particular reference or combination of references.

Applicants submit that all claims are allowable as written and respectfully request early favorable action by the Examiner. If the Examiner believes that a telephone conversation with Applicants' attorney would expedite prosecution of this application, the Examiner is cordially invited to call the undersigned attorney of record.

Date: April 11, 2005

Respectfully submitted,



Name: David J. Dykeman

Registration No.: 46,678

Customer No.: 29934

Palmer & Dodge LLP

111 Huntington Avenue

Boston, MA 02199-7613

Tel. (617) 239-0729